



**Base Hospital Contact: Required for all patients with wide complex tachycardia.**

1. Assess airway and initiate basic and/or advanced airway maneuvers prn ([MCG 1302](#))
2. Administer **Oxygen** prn ([MCG 1302](#))
3. Initiate cardiac monitoring ([MCG 1308](#))  
Document cardiac rhythm and obtain 12-lead ECG if dysrhythmia suspected
4. Maintain supine for patients with signs of poor perfusion, if respiratory status allows
5. Establish vascular access prn ([MCG 1375](#))

**SINUS TACHYCARDIA** (Infants: heart rate < 220bpm, Children: heart rate < 180bpm) ❶

6. For adequate perfusion:  
Monitor closely for potential deterioration, rapid transport
7. For poor perfusion:  
**Normal Saline 20mL/kg IV** per [MCG 1309](#)

**SVT - NARROW COMPLEX** (Infants: heart rate ≥ 220bpm, Children: heart rate ≥ 180bpm)

8. **Adenosine (3mg/mL) 0.1mg/kg rapid IV push**, dose per [MCG 1309](#), maximum 6mg ❷  
Immediately follow with 10mL Normal Saline rapid IV flush

If SVT persists:

**Adenosine (3mg/mL) 0.2mg/kg rapid IV push**, dose per [MCG 1309](#), maximum 12mg

**CONTACT BASE** concurrent with adenosine treatment

9. For persistent poor perfusion after adenosine  
**CONTACT BASE** to discuss order for Synchronized Cardioversion  
**Synchronized cardioversion 1.0J/kg**, dose per [MCG 1309](#) ❸  
May repeat x2 at **2.0J/kg**, dose per [MCG 1309](#)

Consider sedation prior to cardioversion:

**Midazolam (5mg/mL) 0.1mg/kg slow IV/IO push or IM/IN**, dose per [MCG 1309](#)  
May repeat in 5 min prn x1, maximum 2 doses all routes

**WIDE COMPLEX (WCT) – REGULAR/MONOMORPHIC**

10. For adequate perfusion:  
**Adenosine (3mg/mL) 0.1mg/kg rapid IV push**, dose per [MCG 1309](#), maximum 6mg ❷ ❸  
Immediately follow with 10mL Normal Saline rapid IV flush

If WCT persists:



**Treatment Protocol: CARDIAC DYSRHYTHMIA - TACHYCARDIA**

**Ref. No. 1213-P**

**Adenosine (3mg/mL) 0.2mg/kg rapid IV push**, dose per [MCG 1309](#), maximum 12mg <sup>3</sup>

11. For poor perfusion:

**CONTACT BASE** to discuss order for:

Adenosine (3mg/mL) 0.2mg/kg rapid IV push, dose per [MCG 1309](#), maximum 12mg and/or

Synchronized cardioversion 1.0J/kg, dose per [MCG 1309](#) <sup>3 4</sup>

May repeat x2 at **2.0J/kg**, dose per [MCG1309](#)

Consider sedation prior to cardioversion:

**Midazolam (5mg/mL) 0.1mg/kg IV push**, dose per [MCG 1309](#)

If unable to obtain venous access, **Midazolam (5mg/mL) 0.1mg/kg IM/IN**, dose per [MCG 1309](#)

May repeat in 5 min prn x1, maximum 2 doses all routes

**WIDE-COMPLEX – IRREGULAR**

12. For adequate perfusion:

**CONTACT BASE** and monitor closely for potential deterioration

13. For poor perfusion:

**CONTACT BASE** to discuss order for synchronized cardioversion 1.0J/kg, dose per [MCG 1309](#) <sup>4</sup>

May repeat x2 at **2.0J/kg**, dose per [MCG1309](#)

Consider sedation prior to cardioversion:

**Midazolam (5mg/mL) 0.1mg/kg slow IV/IO push or IM/IN**, dose per [MCG 1309](#)

May repeat in 5 min prn x1, maximum 2 doses all routes



**SPECIAL CONSIDERATIONS**

- ❶ Sinus tachycardia is common and SVT is rare. Consider sinus tachycardia in patients with history of fever, volume loss (e.g., vomiting or diarrhea), or congenital heart disease. An indication of sinus tachycardia is narrow complex and beat-to-beat variability seen on the ECG. Vital signs vary by age and normal ranges can be found in [MCG 1309](#). Any pediatric patient with vital signs outside the normal range for age should be considered potentially ill and transported to an EDAP or PMC if criteria are met.
- ❷ Contraindications: 2<sup>nd</sup> and 3<sup>rd</sup> Degree Heart Blocks; history of Sick Sinus Syndrome
- ❸ Regular monomorphic wide complex tachycardia may be a supraventricular rhythm with a bundle branch or aberrancy. In this case, Adenosine may convert the rhythm to sinus and AHA guidelines recommend its use for regular monomorphic wide complex tachycardia.
- ❹ For failure to convert or transient conversion to normal sinus rhythm, consider expedited transport.

